Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Message Text

LIMITED OFFICIAL USE

PAGE 01 STATE 078822

45
ORIGIN AEC-11

INFO OCT-01 NEA-10 ISO-00 SS-20 PM-07 NSC-07 ACDA-19

CIAE-00 INR-10 IO-14 L-03 NSAE-00 RSC-01 SCI-06

FEA-02 SSO-00 INRE-00 NSCE-00 EB-11 EUR-25 COME-00

OMB-01 TRSE-00 /148 R

66605
DRAFTED BY: USAEC/DIP:DCFOSTER
APPROVED BY: SCI:HDBREWSTER
USAEC/DIP:ASFRIEDMAN
NEA/TUR:MR. HIRSHORN
---------- 108714
O 181631Z APR 74
FM SECSTATE WASHDC
TO AMEMBASSY ANKARA IMMEDIATE

LIMITED OFFICIAL USE STATE 078822

E.O. 11652: N/A
TAGS: TECH, BEXP
SUBJ: GOT CONSIDERATION OF ALTERNATIVE NUCLEAR POWER TECHNOLOGIES

REF: ANKARA 2547

1. FOR EMBASSY USE, AS APPROPRIATE, THE FOLLOWING ARE SOME OF THE ARGUMENTS WHICH MAY BE USED IN SUPPORT OF LIGHT WATER REACTOR (LWR) SYSTEMS AS OPPOSED OTHER TECHNOLOGIES.

A. ENRICHED URANIUM FUELED LWR REACTORS HAVE ACCUMULATED MUCH MORE OPERATING EXPERIENCE THAN ANY OTHER TYPE INCLUDING NATURAL U FUELED TYPE. LWR HAS DOMINATED IN NUCLEAR POWER PROGRAMS AROUND THE WORLD FOR THIS REASON AND DUE ALSO TO BROAD BASE OF PROVEN CONSTRUCTION EXPERIENCE, ECONOMIC CONSIDERATIONS AND RELIABLE AVAILABILITY OF ENRICHED U FUEL. IN REGARD THIS LATTER NO SHORTAGE IS EXPECTED AND COMPETITION TO SUPPLY IS
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 STATE 078822

RAPIDLY DEVELOPING IN SEVERAL COUNTRIES. U.S. HAS GOOD RECORD

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

IN MAKING ENRICHING SERVICES AVAILABLE ABROAD ON SAME TERMS AS
TO U.S. DOMESTIC CUSTOMERS WHO FIND NUCLEAR POWER THEIR CHEAPEST
AND BEST OPTION.

B. U.S. REACTOR SUPPLIERS HAVE GREATEST FABRICATION
CAPACITY AND PARTS INVENTORY.

C. AS FOR SUPPLY ENRICHING SERVICES, U.S. HAS PROVEN RECORD
OF RELIABILITY AS SUPPLIER AND SERVICE HAS BEEN MADE AVAILABLE
ABROAD ON ESSENTIALLY SAME BASIS AS PROVIDED U.S. CUSTOMERS.
FURTHERMORE, AEC HAS STATED INTENTION TO SEE THERE IS NO SHORTFALL
IN ENRICHING CAPACITY TO FUEL NUCLEAR PROGRAMS OF ITSELF AND
FRIENDS. IN ADDITION TO U.S., SOVIETS, EURODIF (FRANCE), URENCO
(U.K., FRG, NETHERLANDS CENTRIFUGE GROUP), CURRENTLY OFFERING
ENRICHING SERVICES, AND OTHERS IN EUROPE, CANADA AND SOUTH AFRICA
MAY IN FUTURE, INSURING NOT ONLY SUPPLY BUT COMPETITION. LARGE
DEGREEOF INTEREST THIS AREA INDICATES GENERAL CONVICTION LWR
WILL CONTINUE DOMINATE WORLD MARKET. U TO BE ENRICHED FOR FUEL IS
WIDELY AVAILABLE ON WORLD MARKET.

D. TURKS MAY WISH TO CONSIDER QUESTION OF INDEPENDENCE OF HEAVY
WATER SUPPLY AS EQUALLY IMPORTANT TO THAT OF FUEL. ALTHOUGH THE
U.S. HAS IN THE PAST SUPPLIED SOME HEAVY WATER FOR USE IN REACTORS
ABROAD (AND IN FACT MUCH OF THE CANADIAN PROGRAM TO DATE HAS BEEN
DEPENDENT ON U.S. SUPPLY) THE U.S. HAS NO PLANS PRODUCE HEAVY
WATER FOR EXPORTS IN LARGE QUANTITIES REQUIRED FOR POWER REACTOR USE.
WE KNOW OF NO OTHER SIGNIFICANT SOURCES BUT CANADA WHICH HAS IN
PAST HAD DIFFICULTY MEETING OWN NEEDS, NECESSITATING SHUTDOWNS OF
SOME REACTORS TO START UP OTHERS. A DECISION TO INSTALL INDIGINOUS
HEAVY WATER PLANT FOR OWN SUPPLY NOT PRACTICAL EXCEPT FOR RELATIVELY
LARGE, GROWING PROGRAM AND IMPLIES A LONG-TERM COMMITMENT TO THE
NATURAL U TECHNOLOGY.

E. BENEFITS TO TURKEY (OR ANY CUSTOMER) OF LWR INCLUDE
HIGH RELIABILITY, HIGH SAFETY MARGIN AND LOW CAPITAL COST PER
UNIT OF GENERATING CAPACITY.

F. CHOICE SHOULD BEAR IN MIND FACT THAT FIRST SEVERAL PLANTS
SHOULD BE OF SAME GENERAL TYPE TO MAXIMIZE EFFICIENT USE OF
SCARCE SPECIALIST MANPOWER RESERVES AND SIMPLIFY TRAINING
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PROGRAMS FOR BOTH THE OPERATING UTILITY AND THE GOVERNMENTAL ASPECTS
OF THE NATIONAL PROGRAM. RESOURCES FOR SUCH EDUCATION AND TRAINING
FUNCTIONS ARE MOST WIDELY AVAILABLE FOR LWR TECHNOLOGY.

G. NOTE THAT FRANCE ABANDONED NATURAL U PROGRAM IN FAVOR OF
LWR SOME YEARS AGO, FRG WITH NATURAL U TECHNOLOGY AVAILABLE CHOSE
LWR FOR NATIONAL PROGRAM AND U.K. NOW IN THROES OF RECONSIDERING
EARLY TECHNOLOGY CHOICE, GIVING SERIOUS CONSIDERATION TO LWR.

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

H. IF TECHNICAL PROBLEMS DEVELOP, AS MAY HAPPEN IN ANY NEW TECHNOLOGY, A MAJORITY OF THE WORLD'S INDUSTRIAL RESEARCH BASE (U.K., GERMANY, JAPAN, FRANCE, ITALY, ETC.) WILL ADDRESS THE PROBLEM WHEREAS ONLY RELATIVELY LIMITED INDUSTRIAL RESEARCH BASE AVAILABLE FOR SOLVING PROBLEMS IN HEAVY WATER TECHNOLOGY WHICH MAY ARISE.

I. THERE IS NOW, AND WILL BE MORE INTENSE COMPETITION IN LWR SUPPLY FIELD TO INSURE FUTURE PROGRAM PRICES. THIS NOT TRUE IN CASE OTHER TECHNOLOGIES.

J. J. ARGUMENT THAT U.S. ARCHITECT-ENGINEER OR CONSULTING FIRMS NOT AS COMPETENT AS FOREIGN FIRMS IN EVALUATING RELATIVE MERITS OF NATURAL VERSUS ENRICHED SYSTEMS NOT VALID. U.S. FIRMS HAVE PARTICIPATED IN SUCH EVALUATIONS IN PAST. OF PRIMARY IMPORTANCE IS TECHNICAL COMPETENCE OF STAFF AND EXPERIENCE IN SUCH WORK.

K. AEC EXPLORING POSSIBILITY HAVING TECH REP VISIT. WILL INFORM RESULTS LATER. KISSINGER

LIMITED OFFICIAL USE

NNN

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 JAN 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: NUCLEAR ENERGY, NUCLEAR REACTORS, HEAVY WATER
Control Number: n/a
Copy: SINGLE
Draft Date: 18 APR 1974
Decaption Date: 01 JAN 1960
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Authority: MorefiRH
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 28 MAY 2004
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1974STATE078822
Document Source: CORE
Document Unique ID: 00
Drafter: USAEC/DIP:DCFOSTER
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Film Number: D740090-0555
From: STATE
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1974/newtext/t19740432/aaaabcns.tel
Line Count: 136
Locator: TEXT ON-LINE, ON MICROFILM
Office: ORIGIN AEC
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 3
Previous Channel Indicators: n/a
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: ANKARA 2547
Review Action: RELEASED, APPROVED
Review Authority: MorefiRH
Review Comment: n/a
Review Content Flags:
Review Date: 27 AUG 2002
Review Event:
Review Exemptions: n/a
Review History: RELEASED <27 AUG 2002 by WorrelSW>; APPROVED <12-Sep-2002 by MorefiRH>
Review Markings:

Declassified/Released
US Department of State
EO Systematic Review
30 JUN 2005

Review Media Identifier:
Review Referrals: n/a
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
Secure: OPEN
Status: NATIVE
Subject: GOT CONSIDERATION OF ALTERNATIVE NUCLEAR POWER TECHNOLOGIES
TAGS: TECH, BEXP, TU
To: ANKARA
Type: TE
Markings: Declassified/Released US Department of State EO Systematic Review 30 JUN 2005

Declassified/Released US Department of State EO Systematic Review 30 JUN 2005